

### **Amendments to the Claims**

*Please amend the claims to read as follows:*

1. (Currently Amended) Chewing gum comprising at least two different biodegradable polymers, wherein said at least two different biodegradable polymers have a different glass transition temperature  $T_g$ , wherein at least one of the biodegradable polymers has a glass transition of at least  $+1^{\circ}\text{C}$ , and wherein at least one of the at least two different biodegradable polymers has a glass transition temperature of less than  $0^{\circ}\text{C}$ .
2. (Original) Chewing gum according to claim 1, wherein the at least two different polymers are hydrophilic.
3. (Previously presented) Chewing gum according to claim 1, wherein the difference in molecular weight between the at least two different polymers is at least 1000 g/mol Mn.
4. (Previously presented) Chewing gum according to claim 1, wherein the difference in molecular weight between the at least two different polymers is at least 50000 g/mol Mn.
5. (Previously presented) Chewing gum according to claim 1, wherein at least one of said at least two different biodegradable polymers comprises a biodegradable elastomer and at least one of said at least two different biodegradable polymers comprises a biodegradable plasticizer, said biodegradable plasticizer comprising at least one biodegradable polymer.
6. (Previously presented) Chewing gum according to claim 5, wherein the molecular weight of said biodegradable plasticizer is in the range of 500-19,000 g/mol.
7. (Canceled).

8. (Currently amended) Chewing gum according to claim 5, wherein said at least two different biodegradable polymers have [a] different glass transition temperatures  $T_g$ .
9. (Canceled).
10. (Previously presented) Chewing gum according to claim 1, wherein at least one of the biodegradable polymers has a glass transition of at least  $+10^{\circ}\text{C}$ .
11. (Previously presented) Chewing gum according to claim 1, wherein at least one of the biodegradable polymers, has a glass transition of at least  $+20^{\circ}\text{C}$ .
12. (Previously presented) Chewing gum according to claim 1, wherein at least one of the biodegradable polymers comprises a biodegradable elastomer.
13. (Previously presented) Chewing gum according to claim 12, wherein the molecular weight of said biodegradable elastomer is in the range of 10000-1000000 g/mol  $M_n$ .
14. (Canceled).
15. (Previously presented) Chewing gum according to claim 1, wherein at least one of the at least two different biodegradable polymers has a glass transition temperature of less than  $-30^{\circ}\text{C}$ .
16. (Currently amended) Chewing gum according to claim 1, wherein the resulting chewing gum has at least two different glass transition[s] temperatures  $T_g$ .
17. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum comprises at least one biodegradable elastomer having a glass transition temperature  $T_g$  below  $0^{\circ}\text{C}$ . and at least one biodegradable plasticizer having a glass transition temperature  $T_g$  exceeding  $0^{\circ}\text{C}$ .
18. (Previously presented) Chewing gum according to claim 17, wherein the at least

one plasticizer comprises biodegradable polymer obtained by polymerization of one or more cyclic esters.

19. (Previously presented) Chewing gum according to claim 17, wherein the at least one elastomer comprises a biodegradable polymer obtained by polymerization of one or more cyclic esters.

20. (Previously presented) Chewing gum according to claim 17, wherein the at least one elastomer comprises edible polyesters.

21. (Previously presented) Chewing gum according to claim 17, wherein the at least one elastomer comprises edible polyesters or polyhydroxyalkanoates.

22. (Previously presented) Chewing gum according to claim 1, wherein said chewing gum comprises at least one biodegradable elastomer in the amount of about 0.5 to about 70% wt of the chewing gum, at least one biodegradable plasticizer in the amount of about 0.5 to about 70% wt of the chewing gum and at least one chewing gum ingredient chosen from the groups consisting of softeners, sweeteners, flavoring agents, active ingredients and fillers in the amount of about 2 to about 80% wt of the chewing gum.

23. (Previously presented) Chewing gum according to claim 1, wherein the at least one biodegradable polymer comprises at least 25% of the chewing gum polymers.

24. (Previously presented) Chewing gum according to claim 1, wherein all the biodegradable polymers comprised in the chewing gum comprise at least 25%.

25. (Previously presented) Chewing gum according to claim 1, wherein all the biodegradable polymers comprised in the chewing gum comprise at least 80%.

26. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum is substantially free of non-biodegradable polymers.

27. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum is free of non-biodegradable polymers.
28. (Previously presented) Chewing gum according to claim 22, wherein said chewing gum ingredients comprise flavoring agents.
29. (Previously presented) Chewing gum according to claim 28, wherein said flavoring agents comprise natural and synthetic flavorings in the form of natural vegetable components, essential oils, essences, extracts, powders, including acids or other substances capable of affecting the taste profile.
30. (Previously presented) Chewing gum according to claim 28, wherein said chewing gum comprises flavoring agents in the amount of 0.01 to about 30 wt %, said percentage being based on the total weight of the chewing gum.
31. (Previously presented) Chewing gum according to claim 28, wherein said chewing gum comprises flavoring agents in the amount of 0.2 to about 4 wt %, said percentage being based on the total weight of the chewing gum.
32. (Previously presented) Chewing gum according to claim 28, wherein said flavoring agent comprises water soluble ingredients.
33. (Previously presented) Chewing gum according to claim 32, wherein said water soluble flavoring agent comprises acids.
34. (Previously presented) Chewing gum according to claim 28, wherein said flavoring agent comprises water insoluble ingredients.
35. (Previously presented) Chewing gum according to claim 22, wherein said chewing gum ingredients comprise sweeteners.
36. (Previously presented) Chewing gum according to claim 35, wherein said sweetener comprises bulk sweeteners.

37. (Previously presented) Chewing gum according to claim 36, wherein the chewing gum comprises bulk sweeteners in the amount of about 5 to about 95% by weight of the chewing gum.

38. (Previously presented) Chewing gum according to claim 35, wherein said sweetener comprises high intensity sweeteners.

39. (Previously presented) Chewing gum according to claim 38, wherein the high intensity sweeteners comprise sucralose, aspartame, salts of acesulfame, alitame, saccharin and its salts, cyclamic acid and its salts, glycyrrhizin, dihydrochalcones, thaumatin, monellin, sterioside, alone or in combination.

40. (Previously presented) Chewing gum according to claim 38, wherein the chewing gum comprises high intensity sweeteners in the amount of about 0 to about 1% by weight of the chewing gum.

41. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum comprises at least one softener.

42. (Previously presented) Chewing gum according to claim 41, wherein the at least one softener comprises tallow, hydrogenated tallow, hydrogenated and partially hydrogenated vegetable oils, cocoa butter, glycerol monostearate, glycerol triacetate, lecithin, mono-, di- and triglycerides, acetylated monoglycerides, fatty acids,--stearic acid, palmitic acid, oleic acid, linoleic acids, waxes, polyglycol esters or mixtures thereof.

43. (Previously presented) Chewing gum according to claim 41, wherein the chewing gum comprises softeners in the amount of about 0 to about 18% by weight of the chewing gum.

44. (Previously presented) Chewing gum according to claim 22, wherein said chewing gum ingredients comprise active ingredients.

45. (Previously presented) Chewing gum according to claim 44, said active ingredients being selected from the group consisting of: Acetaminophen, Acetylsalicylic acid, Buprenorphine, Bromhexin, Celcoxib, Codeine, Diphenhydramin, Diclofenac, Etoricoxib, Ibuprofen, Indometacin, Ketoprofen, Lumiracoxib, Morphine, Naproxen, Oxycodon, Parecoxib, Piroxicam, Rofecoxib, Tenoxicam, Tramadol, Valdecocix, Calciumcarbonat, Magaldrate, Disulfiram, Bupropion, Nicotine, Azithromycin, Clarithromycin, Clotrimazole, Erythromycin, Tetracycline, Granisetron, Ondansetron, Prometazin, Tropisetron, Brompheniramine, Ceterizin, Ieco-Ceterizin, Chlorcyclizine, Chlorpheniramin, Chlorpheniramin, Difenhidramine, Doxylamine, Fenofenadin, Guaifenesin, Loratidin, des-Loratidin, Phenyltoloxamine, Promethazin, Pyridamine, Terfenadin, Troxerutin, Methyldopa, Methylphenidate, Benzalcon. Chloride, Benzeth. Chloride, Cetylpyrid. Chloride, Chlorhexidine, Ecabet-sodium, Haloperidol, Allopurinol, Colchicine, Theophylline, Propanolol, Prednisolone, Prednisone, Fluoride, Urea, Miconazole, Actot, Glibenclamide, Glipizide, Metformin, Miglitol, Repaglinide, Rosiglitazone, Apomorphin, Cialis, Sildenafil, Vardenafil, Diphenoxylate, Simethicone, Cimetidine, Famotidine, Ranitidine, Ratinidine, cetirizin, Loratadine, Aspirin, Benzocaine, Dextrometorphan, Ephedrine, Phenylpropanolamine, Pseudoephedrine, Cisapride, Domperidone, Metoclopramide, Acyclovir, Dioctylsulfosucc., Phenolphthalein, Almotriptan, Eletriptan, Ergotamine, Migea, Naratriptan, Rizatriptan, Sumatriptan, Zolmitriptan, Aluminium salts, Calcium salts, Ferro salts, Silver salts, Zinc-salte, Amphotericin B, Chlorhexidine, Miconazole, Triamcinolonacetone, Melatonin, Phenobarbital, Caffeine, Benzodiazepine, Hydroxyzine, Meprobamate, Phenothiazine, Buclizine, Brometazine, Cinnarizine, Cyclizine, Difenhidramine, Dimenhydrinate, Buflomedil, Amphetamine, Caffeine, Ephedrine, Orlistat, Phenylephedrine, Phenylpropanolamin, Pseudoephedrine, Sibutramin, Ketoconazole, Nitroglycerin, Nystatin, Progesterone, Testosterone, Vitamin B12, Vitamin C, Vitamin A, Vitamin D, Vitamin E, Pilocarpin, Aluminiumaminoacetate, Cimetidine, Esomeprazole, Famotidine, Lansoprazole, Magnesiumoxide, Nizatide and/or Ratinidine or derivatives and mixtures thereof.

46. (Previously presented) Chewing gum according to claim 22, wherein the chewing

gum is substantially free of non-biodegradable polymers.

47. (Currently amended) Chewing gum according to claim 1, wherein one of the at least two ~~the~~ biodegradable polymers is a polymer obtained by polymerization of one or more cyclic esters wherein the cyclic esters are selected from the groups consisting of glycolides, lactides, lactones, cyclic carbonates and mixtures thereof.

48. (Currently amended) Chewing gum according to claim 47, wherein said lactones ~~monomers~~ are chosen from the group consisting of  $\epsilon$ -caprolactone,  $\delta$ -valerolactone,  $\gamma$ -butyrolactone,  $\beta$ -propiolactone, and mixtures thereof, wherein the lactone is optionally substituted with one or more alkyl or aryl substituents at any non-carbonyl carbon atoms along the ring, including compounds in which two substituents are contained on the same carbon atom.

49. (Previously presented) Chewing gum according to claim 47, wherein the carbonate monomer is selected from the group consisting of trimethylene carbonate, 5-alkyl-1,3-dioxan-2-one, 5,5-dialkyl-1,3-dioxan-2-one, or 5-alkyl-5-alkyloxycarbonyl-1,3-dioxan-2-one, ethylene carbonate, 3-ethyl-3-hydroxymethyl, propylene carbonate, trimethylolpropane monocarbonate, 4,6-dimethyl-1,3-propylene carbonate, 2,2-dimethyl trimethylene carbonate, 1,3-dioxepan-2-one and mixtures thereof.

50. (Previously presented) Chewing gum according to claim 47, wherein cyclic ester polymers and their copolymers resulting from the polymerization of cyclic ester monomers are selected from the group consisting of poly(L-lactide); poly(D-lactide); poly(D, L-lactide); poly(mesolactide); poly(glycolide); poly(trimethylenecarbonate); poly( $\epsilon$ -caprolactone); poly (L lactide-co-D, L-lactide); poly(L-lactide-co-meso-lactide); poly(L-lactide co-glycolide); poly (L-lactide-co-trimethylenecarbonate); poly(L-lactide co- $\epsilon$ -caprolactone) poly(D, L-lactide-co-meso-lactide) ; poly(D, L lactide-co-glycolide) ; poly (D, L-lactide-co-trimethylenecarbonate); poly(D, L-lactide-co- $\epsilon$ -caprolactone); poly(meso-lactide-co glycolide) ; poly (meso-lactide-co-trimethylenecarbonate); poly(meso lactide-co- $\epsilon$ -caprolactone); poly(glycolide-cotrimethylenecarbonate); and poly(glycolide-co- $\epsilon$ -

caprolactone).

51. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum comprises filler.

52. (Previously presented) Chewing gum according to claim 51, wherein the chewing gum comprises filler in an amount of about 0 to about 50% by weight of the chewing gum.

53. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum comprises at least one coloring agent.

54. (Previously presented) Chewing gum according to claim 1, wherein the chewing gum is coated with an outer coating.

55. (Previously presented) Chewing gum according to claim 54, wherein the outer coating is a hard coating.

56. (Previously presented) Chewing gum according to claim 55, wherein the hard coating is a coating selected from the group consisting of a sugar coating, a sugarless coating, and a combination thereof.

57. (Previously presented) Chewing gum according to claim 55, wherein the hard coating comprises 50 to 100% by weight of a polyol selected from the group consisting of sorbitol, maltitol, mannitol, xylitol, erythritol, lactitol and isomalt.

58. (Previously presented) Chewing gum according to claim 54, wherein the outer coating is an edible film comprising at least one component selected from the group consisting of an edible film-forming agent and a wax.

59. (Previously presented) Chewing gum according to claim 58, wherein the film-forming agent is selected from the group consisting of a cellulose derivative, a modified starch, a dextrin, gelatine, shellac, gum arabic, zein, a vegetable gum, a



synthetic polymer and any combination thereof.

60. (Previously presented) Chewing gum according to claim 54, wherein the outer coating comprises at least one additive component selected from the group consisting of a binding agent, a moisture absorbing component, a film forming agent, a dispersing agent, an antisticking component, a bulking agent, a flavoring agent, a coloring agent, a pharmaceutically or cosmetically active component, a lipid component, a wax component, a sugar, an acid and an agent capable of accelerating the after-chewing degradation of the degradable polymer.

61. (Previously presented) Chewing gum according to claim 54, wherein the outer coating is a soft coating.

62. (Previously presented) Chewing gum according to claim 61, wherein the soft coating comprises a sugar free coating agent.

63. (Previously presented) Chewing gum according to claim 1, wherein said chewing gum comprises conventional chewing gum polymers or resins.

64. (Previously presented) Chewing gum according to claim 1, wherein the at least one biodegradable polymer comprises at least 5% of the chewing gum polymers.

65. (Previously presented) Chewing gum according to claim 1, wherein all the biodegradable polymers comprised in the chewing gum comprise at least 25% of the chewing gum polymers.

66. (Previously presented) Chewing gum according to claim 1, wherein all the biodegradable polymers comprised in the chewing gum comprise at least 80% of the chewing gum polymers.

67. (Canceled).